Title: Adult acquisition of grammatical gender in instructed L2 Spanish and the role of metacognition

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This study investigates the nature of grammatical gender knowledge of adult native English speakers (N = 24) learning Spanish as a second language (L2) in the instructed context and contributes to the analysis of the role that metacognition plays in adult L2 acquisition of a morphosyntactic phenomenon not instantiated in L1 (English). This study seeks both to corroborate abundant previous research on the linguistic variables of grammatical gender (e.g. Spino-Seijas, 2017; Foote, 2015; Alarcón, 2011; Montrul et al., 2008) and to examine metacognition as a new learner variable not analyzed in previous studies. Furthermore, this study introduces a tool for measuring metacognitive awareness in L2 learning through a language-oriented adaptation of the original Metacognitive Awareness Inventory (MAI) (Schraw & Dennison, 1994). Metacognitive awareness can be defined as the ability to reflect upon, understand and control one's learning process (Schraw & Dennison, 1994). In order to examine how L2 learners process grammatical gender, the influence of four independent binary variables is analyzed in both a written recognition task and an oral picture description task: gender class (masculine or feminine), domain of agreement (determiner, adjective), noun morphology (overt or non-overt gender marking), and task modality (written or oral). Results indicate the following decreasing order in effect size of each binary variable analyzed ($p < .001$): morphological markedness ($d = 2.16$) > task modality ($d = 2.10$) > gender class ($d = 1.7$) > domain ($d = -1.63$). In addition, a moderate positive correlation ($r = .34$, $p = .052$) is observed in the dataset between metacognitive awareness scores and gender accuracy. Results further demonstrate the particular role of metacognition in adult L2 learning as a factor more strongly associated ($r = .33$, $p = .059$) with offline, explicit processing of language, during a written recognition task, than with online/spontaneous production ($r = .28$, $p = .095$), during an oral description task. Furthermore, metacognitive awareness appears to modulate accuracy with grammatical gender of those forms which are most difficult to acquire: feminine nouns, non-overtly marked nouns, and determiner agreement. Therefore, metacognition appears to be an important skill worth developing in adult L2 instruction as it may lead to specific proficiency gains in problematic areas of morphosyntax.

Selected References

Alarcón, I. (2011). Spanish gender agreement under complete and incomplete acquisition: Early and late bilinguals' linguistic behavior within the noun phrase. *Bilingualism: Language and Cognition*, 14(3), 332–350.

Foote, R. (2015). The production of gender agreement in native and L2 Spanish: The role of morphophonological form. *Second Language Research*, 31(3), 343–373.

Montrul, S., Foote, R., & Perpiñán, S. (2008). Gender agreement in adult second language learners and Spanish heritage speakers: The effects of age and context of acquisition. *Language Learning*, 58(3), 503–553.

Schraw, G., & Dennison, R. S. (1994). Assessing metacognitive awareness. *Contemporary Educational Psychology*, 19(4), 460–475.

Spino-Seijas, L. A. L. (2017). Grammatical gender agreement in L2 Spanish: The role of syntactic context (Doctoral dissertation). Michigan State University, United States.